

Section 1-1: Surveys and Sampling Methods

By the end of this lesson, you should be able to answer:

- What are the different sampling methods?
- What are biased surveys?

Where you might see this in the real world:

- Manufacturing, research, marketing, politics

Define the following words:

1. Population

2. Sample

3. Biased

4. Unbiased

Four Different Methods of Sampling

Method	Explanation	Example
Random Sampling		
Cluster Sampling		
Convenience Sampling		
Systematic Sampling		

Example 1: A publisher wants to know which types of books are most popular with high school students. Listed are three ideas for collecting data.

Identify the sampling method represented by each.

- a. Dial phone numbers at random across the country and ask to speak to a teenager.
- b. Choose twenty high schools at random across the country and survey each student in each school.
- c. Give questionnaires one afternoon to all high school students visiting the White House on class trips to Washington, D.C.

Example 2: The table shows the results of a survey of 300 Americans asked to name their favorite spectator sport.

Sport	Percent Favorite
Basketball	32%
Baseball	28%
Football	22%
Other	6%
Soccer	5%
Tennis	4%
Golf	3%

- a. How many of those surveyed chose baseball as their favorite sport?
- b. If the survey was unbiased, how many of 5000 Americans might be expected to choose soccer as their favorite spectator sport?

Problem Set:

"I have found power in the mysteries of thought." - Euripides